11. **Hippodamia extensa** Mulsant.

Hippodamia extensa Mulsant, Spécies des Coléopterès trimères sécuripalpes, p. 15, 1851.

This species probably has the most limited range of any North American species, as apparently it is confined to the salt marshes of San Francisco Bay region, California. The writer has examined specimens from Alameda and Milbræ (E. C. Van Dyke).

12. **Hippodamia glacialis** (Fabricius).

Coccinella glacialis Fabricius, Systema Entomologiæ, p. 80, 1775.
Coccinella abbreviata Fabricius, Mantissa Insectorum, p. 54, 1787.
Coccinella remota Weber, Observationes entomologicæ, p. 49, 1801.

This common Eastern species has been examined from Melrose Highlands and Forest Hills, Massachusetts (P. H. Timberlake); West Springfield, Massachusetts (H. E. Smith); Salisbury, North Carolina (R. A. Vickery); and Tower City, North Dakota (Miriam W. Reeves).

13. **Hippodamia** species.

One male from Soda Springs, Idaho, remains undetermined. It runs to *subsimilis* in Casey's tables, and may possibly be that species, although *subsimilis* on the other hand might as likely prove to be a form of *5-signata*.

ON THE GENUS RHODESIELLA C. F. ADAMS (DIPTERA).

By M. Bezzi,

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In 1905 Mr. C. F. Adams erected the genus *Rhodesiella* for a small South African fly collected in Rhodesia, near Salisbury, January, 1901, by Mr. Frank L. Snow. The new genus was placed in the family Agromyzidæ, but nothing was said about its natural affinities; the name has subsequently appeared only twice in the dipterological literature, besides the citation in the Zoölogical Record for 1906, vol. XLIII, p. 391. It was conserved by me in the family Agromyzidæ in my Catalog of the African Diptera (1908, p. 194), but Prof. Melander has removed it to the Milichiinæ in his table of the genera of the subfamily (1913, p. 237).

Through the kindness of Mr. Chas. P. Alexander I have recently received for examination the type of *Rhodesiella tarsalis* Ad., and with the greatest interest I have noted that it is the same fly as described by Prof. de Meijere under the name of *Meroscinis scutellata* (1908, p. 172), as collected in Java, near Semarang, also in the month of January, by Mr. Jacobson. The fly has subsequently been found in other localities of the Oriental Region, and has also been recorded by Becker (1910, p. 432) from the Ethiopian Region. I have, indeed, received it from Ghinda, Erythræa, by Dr. Alb. Mochi. The only difference is that the Rhodesian type-specimen has the third antennal joint nearly black above, while usually it is entirely yellow.

The fly belongs to the family Chloropidæ, subfamily Botanobiinæ (= Oscininæ, = Oscinellinæ, = Oscinosominæ). The family was evidently mistaken by Adams on account of the rather developed fronto-orbital bristles, which are also present in some other genera of the Chloropidæ, but they are inserted near the sides of an evident frontal triangle. In the original diagnosis of this genus, Adams has described, however, the apical spinous tubercles of the scutellum, a feature which is eminently charactristic of the natural group of flies to which the insect in reality belongs, while it is wanting in the Agromyzidæ and related groups.

Spinous tubercles or spines on the scutellum are an uncommon feature in the so-called acalyptrate flies. They are found only among the Borboridæ, in the genus *Notacanthina*, erected in 1835 by Macquart for the *Scatophaga bispinosa* of Wiedemann; in the Thyreophoridæ; in some Heleomyzidæ, such as *Suillia oxyphora* Mik; in the Rhopalomeridæ, chiefly in the genus *Rhinotora* Schiner; in some Ortalidæ of the subfamily Platystominæ, like the genus *Peltacanthina* Enderlein; in the Diopsidæ; but chiefly in the numerous forms of the Chloropidæ which are grouped around the cosmopolitan genus *Crassiseta*.

In his specific description Adams has, moreover, recorded (p. 198) the deep angle formed by the fourth longitudinal vein at the hind cross vein, a character which is well figured by de Meijere in his original figure (Pl. IV, fig. 14).

Since the type species of the genus *Rhodesiella*, *R. tarsalis* Adams, 1905, is the same insect as the type species of the genus *Meroscinis*,

M. scutellata de Meijere, 1908, there can be no doubt but that the name *Rhodesiella* Adams, 1905, must be employed in place of the name *Meroscinis* de Meijere, 1908.

The Chloropid genus *Rhodesiella* is a very important one, being widely spread over the Oriental and Ethiopian Regions, with rather numerous species, as may be seen from the following list:

Rhodesiella Adams 1905 (= *Meroscinis* de Meijere 1908),
Sp. typ. *tarsalis Adams* 1905 (= *scutellata* de Meijere 1908).

A. From the Oriental Region (arista always pubescent).

a. Scutellum short, rounded at end, with less developed tubercles.

1. *R. meijerei* Becker (1911, p. 92) .....Java.
2. *R. tibiella* Becker (1911, p. 90) .....Ceylon.
3. *R. latipennis* de Meijere (1913, p. 297) .....Java.

b. Scutellum a little more elongate, but rounded at tip, with less developed tubercles.

4. *R. finitima* Becker (1911, p. 92) .....Formosa and New Guinea.

c. Scutellum elongate, triangular or rectangular, as a rule with more developed tubercles.

5. *R. tarsalis* Adams (1905, p. 198)(= *scutellata* de Meijere 1908, p. 172, Pl. IV, fig. 14).....Java, Sumatra, Singapore, Formosa.
6. *R. nitidifrons* Becker (1911, p. 93).....Assam, Java, Formosa.
7. *R. sexseta* de Meijere (1913, p. 295) .....Java.
8. *R. dimidiata* Becker (1911, p. 91) .....Formosa.
9. *R. elegantula* Becker (1911, p. 89) .....Java, Sumatra, Formosa.
10. *R. quadriseta* de Meijere (1913, p. 296) .....Java.
11. *R. conica* Becker (1911, p. 89) .....Java.
12. *R. recta* Becker (1911, p. 91) .....Formosa.
13. *R. pellucida* Becker (1911, p. 92) .....Java.
14. *R. albiseta* Becker (1911, p. 93) .....Java.

B. From the Ethiopian Region.

a. Arista pubescent, wings hyaline.

5 bis. *R. tarsalis* Ad. (*scutellata* de Meij.),
Abyssinia, Erythraea, German East Africa, Rhodesia.

15. *R. æneifrons* Lamb (1912, p. 332, fig. 19, Pl. XVI, figs. 6–7),
Seychelles.
16. *R. rugosa* Lamb (1917, p. 333, Pl. XVI, fig. 8).....Seychelles.

12 bis. *R. recta* Becker .....British East Africa.

b. Arista pubescent, wings spotted or infuscated.

17. *R. plumigera* (Loew 1860) Becker (1913, p. 156),
Abyssinia, Caffraria.
18. *R. cuneata* Becker (1913, p. 156) .....Abyssinia.
19. *R. confluens* Becker (1913, p. 157) .....Abyssinia.
20. *R. infumata* Becker (1913, p. 158).Abyssinia, British East Africa.

c. Arista quite bare, wings infuscated or even hyaline.

21. *R. bicolor* Becker (1910, p. 431) .....German East Africa.
22. *R. annulata* Becker (1910, p. 432) .....German East Africa.
23. *R. kovicsi* Becker (1913, p. 158) .....Abyssinia.

It is not certain that all the above listed species are valid and distinct, or whether they belong to one or different genera.

Since the genus *Rhodesiella* is widely spread over the tropical countries of the Old World, its presence in tropical America may be suspected. Indeed, Becker (1912, p. 129) has stated that the Brazilian *Onychaspidium sexdentatum* Enderlein (1911, p. 196, fig. 4) is a species of *Rhodesiella* (*Meroscinis*); but Enderlein (1913, p. 361) contends that his genus is a sufficiently distinct one, even believing that my African genus *Elaphaspis,* 1912, may be the same. Moreover, Enderlein at the same place (1913, p. 361) has said that his own *Leptopeltastes longiscutellata* (1911, p. 229) from Brazil is a *Rhodesiella* (*Meroscinis*); he also says (pp. 361–362) that the Oriental *Meroscinis meijerei* and *M. tibiella* both belong to his Brazilian genus *Coryphisoptron* (*Discogastrella*).

It is interesting to note that in the subfamily Botanobiinæ, the species having spinous tubercles on the scutellum increase in number from the temperate to the tropical countries, and are represented by vicariant forms in the Oriental, Ethiopian and Neotropical Regions. While the cosmopolitan genus *Crassiseta* (and in Europe the nearly related genus *Myrmecomorpha* = *Elachiptera* s. str.) is the only one which has species in the Palæarctic and in the Nearctic Regions, there are in the warmer parts of Asia, Africa and America numerous forms in which the scutellum shows a very extraordinary shape, or bears very long spiniform tubercles. In the following table these forms are enumerated, region for region, and going from those with less developed scutellar tubercles to those in which this feature is more intensively marked.

Oriental Region.	Ethiopian Region	Neotropical Region.
Crassiseta.	*Crassiseta.*	*Crassiseta.*
Rhodesiella.	*Rhodesiella.*	*Leptopeltastes*
Thyridula.		*Coryphisoptron.*
Prionoscelus.		*Laxobathmis.*
Nomba.		*Enderleiniella.*
Epicelyphus.		*Pentanotaulax.*
Discyphus.	*Elaphaspis.*	*Acanthopeltastes.*
Dactylothyrea.	*Cyrtomomyia.*	*Onychaspidium.*

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CICADAS OF THE GENERA OKANAGANA, TIBICINOIDES AND OKANAGODES, WITH DESCRIPTIONS OF SEVERAL NEW SPECIES.

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The genus *Okanagana* probably contains more species of cicadas than any other in North America, and they are also in many instances quite hard to separate. In the northeastern part of the continent there appear to be only two species, but in the central and western parts it is far otherwise, and in California they are very numerous. As a rule the individuals of the same species resemble one another quite closely in color pattern, but occasional variation is seen, especially when the species is rather widely distributed. In his Preliminary Review of the West Coast Cicadidæ, published in the JOURNAL OF THE N. Y. ENTOMOLOGICAL SOCIETY, March, 1915, Mr. E. P. Van Duzee states that the "structural characters are very few in some of the genera, notably *Okanagana*, and I have been obliged to fall back upon color characters in the preparation of the key. The color and markings, while variable in extent, are quite constant in general facies for each species." A considerable number of species have been made known since 1915, but it will be some time before our collections are sufficiently complete to warrant the statement as to the exact number.

In considering the genus *Okanagana* it became necessary to first